AMENDMENTS TO THE CLAIMS

1. (Original) A process for the preparation of ethyleneamines by reacting monoethanolamine (MEOA) with ammonia in the presence of a catalyst in a reactor (1) and separating the resulting reaction product, which comprises reacting ethylenediamine (EDA) obtained during the separation in a separate reactor (2) in the presence of a catalyst to give diethylenetriamine (DETA), and the resulting reaction product is passed to the separation of the reaction product resulting from reactor 1.

2. (Original) The process for the preparation of ethyleneamines according to claim 1, where the ethyleneamines are EDA, DETA, aminoethylethanolamine (AEEA), piperazine (PIP) and/or triethylenetetramine (TETA).

3. (Previously Presented) The process for the preparation of ethyleneamines according to claim 1, where the proportion of DETA is greater than 20% by weight.

4. (Previously Presented) The process according to claim 1, wherein the reaction in reactor 1 is carried out in the presence of a transition metal catalyst or a zeolite.

5. (Previously Presented) The process according to claim 4 wherein the transition-metal catalyzed reaction in reactor 1 is carried out in the presence of hydrogen.

6. (Previously Presented) The process according to claim 1, wherein the separation of the reaction product resulting from reactor 1 takes place by multistage distillation.

7. (Currently Amended) The process according to claim 2, wherein the separation of the reaction product resulting from reactor 1 takes place in two separation sequences (a first separation sequence and a second separation sequence) by multistage distillation, where in the first separation sequence firstly ammonia, water and optionally hydrogen present are separated off, and in the second separation sequence a separation ~~ninto~~ in to EDA, PIP, MEOA, DETA, N-(2-aminoethyl) piperazine (AEP), N-(2-hydroxyethyl)piperazine (HEP), AEEA, TETA and higher ethyleneamines takes place.

8. (Previously Presented) The process according to claim 1, wherein the reaction in reactor 2 is carried out in the presence of a transition metal catalyst, a zeolite or a phosphate catalyst.

9. (Previously Presented) The process according to claim 8 , wherein the transition-metal catalyzed reaction in reactor 2 is carried out in the presence of hydrogen.

10. (Previously Presented) The process according to claim 7, wherein the reaction product resulting from reactor 2, comprising ammonia and DETA, is passed to the first separation sequence of the separation of the reaction product resulting from reactor 1.

11. (Previously Presented) The process according to claim 7, wherein ammonia and optionally hydrogen is separated off from the reaction product resulting from reactor 2 (separation sequence 3) and the reaction product is then passed to the second separation sequence of the separation of the reaction product resulting from reactor 1.

12. (Previously Presented) The process according to claim 11, wherein the reaction of the EDA to give DETA and the removal of the ammonia is carried out in a reaction column.

13. (Previously Presented) The process according to claim 1, wherein ammonia that is produced during the separation of the reaction product resulting from reactor 1 is returned to reactor 1.

14. (Previously Presented) The process according to claim 11, wherein the ammonia separated off from the resulting reaction product of reactor 2 or the ammonia separated off from the reaction column is returned to reactor 1.